

**Amendment After Final Action**  
**U.S. Patent Application No. 10/043,288**

**REMARKS**

Claims 7 and 9-15 are pending in the subject application. Claims 7 and 9-12 stand rejected. By way of the above amendments, claim 7 has been amended and new claims 13-15 have been added. Support for amended claim 7 and new claims 13-15 can be found throughout the specification (e.g., refer to Figure 3 and page 7, line 1 to page 8, line 22 for claim 13, and page 8, line 23 to page 9, line 21 for claims 14 and 15). Favorable reconsideration of the application and allowance of all of the pending claims are respectfully requested in view of the following remarks.

**Record of Interview**

Applicants wish to thank the Examiner for graciously granting the personal interview of November 15, 2005 to the undersigned attorney. Pursuant to MPEP 713.04, Applicant provides below the substance of the interview.

(A) No exhibits were shown or demonstrations conducted.

(B) Claim 7 was discussed.

(C) The cited Geus, Berger, Wust, and Herwegh references (U.S. Patent No. 5,814,349, 6,103,181, 5,411,693 and 5,700,491) were discussed.

(D) A proposed amendment to claim 7 was discussed. The Examiner indicated that he would reconsider the rejection of this proposed claim. Claim 7 has been amended in accordance with the proposed amendment discussed in this interview.

(E) The general thrust of the principal arguments discussed in the interview are the same as those set forth below in the *Response* section.

(F) The 35 U.S.C. §112, 1<sup>st</sup> paragraph rejection of the final Office Action was also discussed in the interview with respect to the language of claim 7. The Examiner indicated that the proposed amendment to claim 7 would overcome the 35 U.S.C. §112, 1<sup>st</sup> paragraph rejection.

**Response to Prior Art Rejections**

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Claims 7 and 9-12 stand rejected under 35 U.S.C. §112, 1<sup>st</sup> paragraph due to certain language in claim 7. Claim 7 has been amended per the proposed Amendment in the interview, and the Examiner is requested to withdraw this rejection.

Claims 7 and 9-12 further stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,814,349 to Gues et al. ("Gues") in view of U.S. Patent No. 6,103,181 to Berger, and further in view of U.S. Patent No. 5,411,693 to Wust, Jr. ("Wust") and U.S. Patent No. 5,700,491 to Herwegh et al. ("Herwegh"). Applicants respectfully traverse the rejections of the claims based upon the following remarks.

Amended claim 7 recites a method of forming a non-woven web of fibers utilizing a system including a spin beam assembly, and a quenching chamber in communication with a drawing chamber, wherein the system maintains an enclosed environment between the spin beam assembly, the quenching chamber and the drawing chamber to prevent uncontrolled gas currents from entering the enclosed environment. In particular, claim 7 recites the following method steps: (a) delivering a plurality of polymer streams from the spin beam assembly to spinneret orifices, wherein at least two of the polymer streams include differing polymer components, and the polymer streams including differing polymer components are segregated and are independently maintained at different temperatures within the spin beam assembly; (b) extruding the plurality of polymer streams through the spinneret orifices to form a plurality of filaments; (c) quenching the extruded filaments by contacting the filaments with a gas stream in the quenching chamber; (d) drawing the quenched filaments in the drawing chamber; and (e) depositing the drawn filaments onto a forming surface to form a non-woven fibrous web on the forming surface. No combination of Gues, Berger, Wust and/or Herwegh anticipates or renders obvious the combined features of amended claim 7.

While Geus and Berger teach methods of extruding fibers and forming spun-bond webs of fibers, neither of these references discloses or suggests the feature of segregating polymer streams including differing polymer components and independently maintaining such segregated polymer streams at different temperatures in the spin beam assembly as recited in claim 7. In

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fact, Geus fails to even disclose or suggest the feature of forming polymer streams including differing polymer components.

Further, both Wust and Herwegh fail to account for the deficiencies in Geus and Berger with regard to the recited segregation and independent maintaining of different temperatures of the polymer streams with differing polymer components in the spin beam assembly.

As noted by the Examiner, Wust teaches making multi-component fibers by feeding a first polymeric component at a first melt temperature into a spin pack assembly, feeding a second polymeric component at a second melt temperature into the spin pack assembly, and combining the first and second polymeric components into a multi-component configuration by extruding through a spinneret to form multi-component fiber filaments (see Col. 3, lines 32-46 of Wust). However, there is no teaching in Wust of segregating the first and second polymeric components and independently maintaining the polymeric components at separate temperatures within a spin beam assembly as recited in claim 7.

Herwegh teaches a spin beam including melt lines 3 and a heating medium that heats the melt lines within the spin beam, where the melt lines 3 deliver molten polymer streams to a spinneret unit 2 (see Col. 3, lines 5-8 of Herwegh). A main melt line 8 delivers a single molten polymer to the spin beam. Thus, Herwegh teaches heating of melt lines within a spin beam. There is no teaching in Herwegh of segregating polymer streams including different polymer components and independently maintaining the segregated streams at different temperatures in the spin beam as recited in claim 7. At best, Herwegh may heat the melt lines 3 via the heating medium to the same temperature, since there is no indication that any of the melt lines are segregated in any manner from each other to facilitate independent maintaining of different polymer streams at different temperatures within the spin beam. In fact, since there is only a single main melt line disclosed in Herwegh, there is no indication that Herwegh is even capable of providing two polymer streams including different polymer components as recited in claim 7.

Thus, no combination of Geus, Berger, Wust and Herwegh renders obvious the combined features of claim 7, and the Examiner is requested to withdraw the rejection of this claim based upon these references. Since claims 9-12 all depend from claim 7, the Examiner is further

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requested to withdraw the rejection of these claims based upon the combination of these references.

New claim 13 depends from claim 7 and recites the additional feature that the differing polymer components are segregated and independently maintained at different temperatures within the spin beam assembly by providing a plurality of manifold sections within the spin beam assembly, each manifold section being configured to receive a respective polymer component and a heat transfer medium that maintains the respective polymer component at a selected temperature. No combination of Geus, Berger, Wust or Herwegh renders obvious this feature.

Out of all the references cited, only Herwegh discloses heating of melt lines within a spin beam. However, Herwegh is only concerned with melting a single polymer component, since there is only a single melt line 8 that delivers molten polymer to the spin beam. There is no teaching in Herwegh of providing a plurality of manifold sections within the spin beam, where each manifold section is configured to receive a respective polymer component and a heat transfer medium that maintains the respective polymer component at a selected temperature, as recited in claim 13. Thus, claim 13 should be allowed over any combination of Geus, Berger, Wust and/or Herwegh, based upon the previous remarks for claim 7 as well as for the additional feature recited in this claim.

New claim 14 depends from claim 7 and recites the additional feature that the differing polymer components are segregated and independently maintained at different temperatures within the spin beam assembly by providing a plurality of pump blocks within the spin beam assembly and a plurality of pumps disposed on the pump blocks, and the spin beam assembly and pump blocks are configured to limit heat transfer from each pump block to polymer components flowing within each pump block. There is simply no disclosure or suggestion of such a feature in any of Geus, Berger, Wust and Herwegh. Thus, claim 14 should be allowed over any combination of these references, based upon the previous remarks for claim 7 as well as for the additional feature recited in this claim.

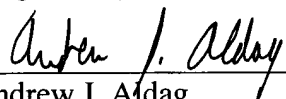
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New claim 15 depends from claim 7 and recites the additional feature that the differing polymer components are segregated and independently maintained at different temperatures within the spin beam assembly by providing a plurality of pump blocks within the spin beam assembly and a plurality of pumps disposed on the pump blocks, and the spin beam assembly and pump blocks are configured to limit heat transfer between different polymer components flowing within each pump block. As with claim 14, there is no disclosure or suggestion of such a feature in any of Geus, Berger, Wust and Herwegh. Thus, claim 15 should be allowed over any combination of these references, based upon the previous remarks for claim 7 as well as for the additional feature recited in this claim.

In view of the foregoing, the Examiner is respectfully requested to find the application to be in condition for allowance with claims 7 and 9-15. However, if for any reason the Examiner feels that the application is not now in condition for allowance, the Examiner is respectfully requested to call the undersigned attorney to discuss any unresolved issues and to expedite the disposition of the application.

Submitted herewith is a petition for a two month extension of time and a Request for Continued Examination with the requisite fees. Applicants hereby petition for any additional extension of time that may be required to maintain the pendency of this case, and any required fee for such extension is to be charged to Deposit Account No. 05-0460.

Respectfully submitted,

  
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